

Fig. 1

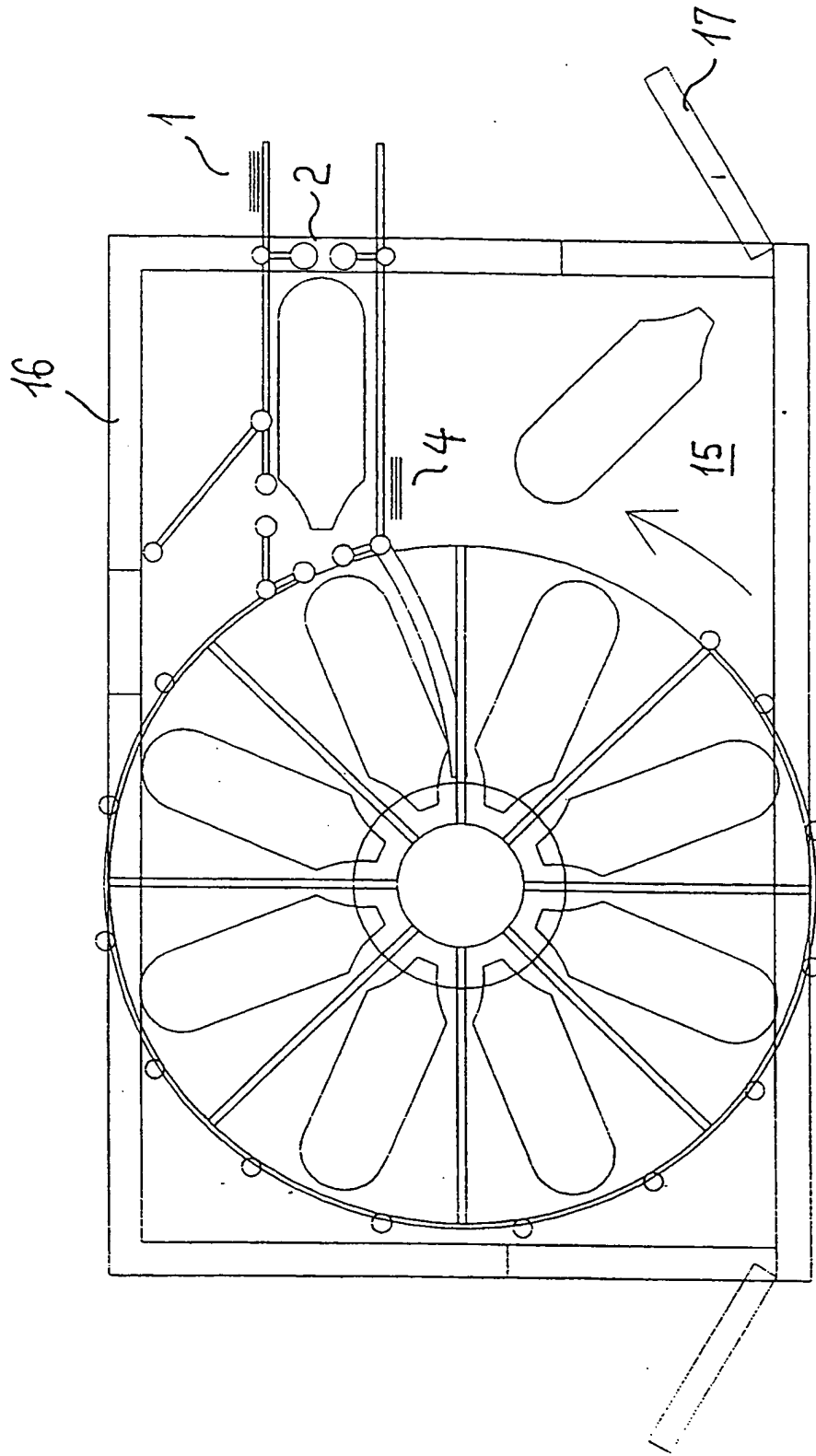


Fig. 2

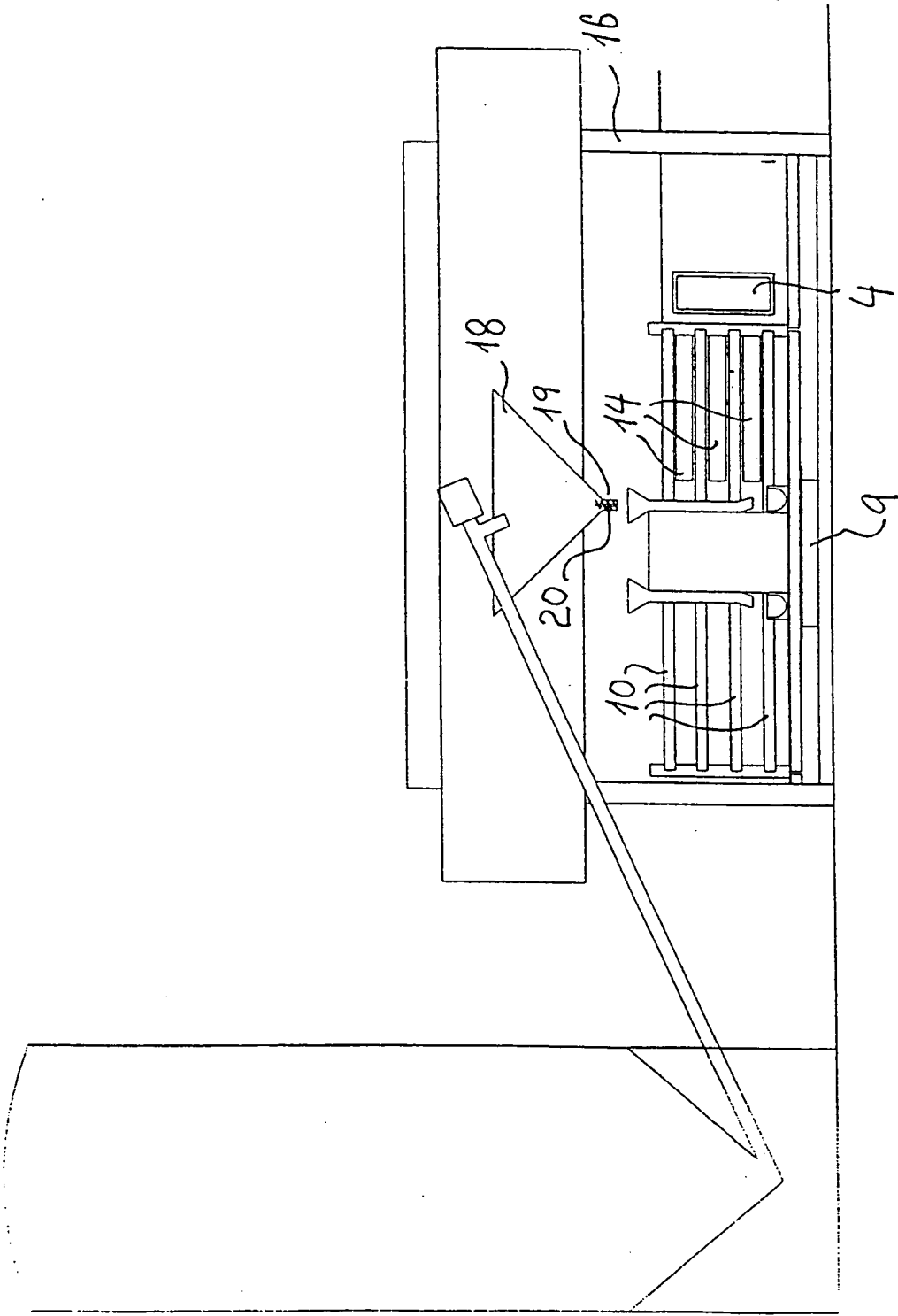


Fig. 3

4/17

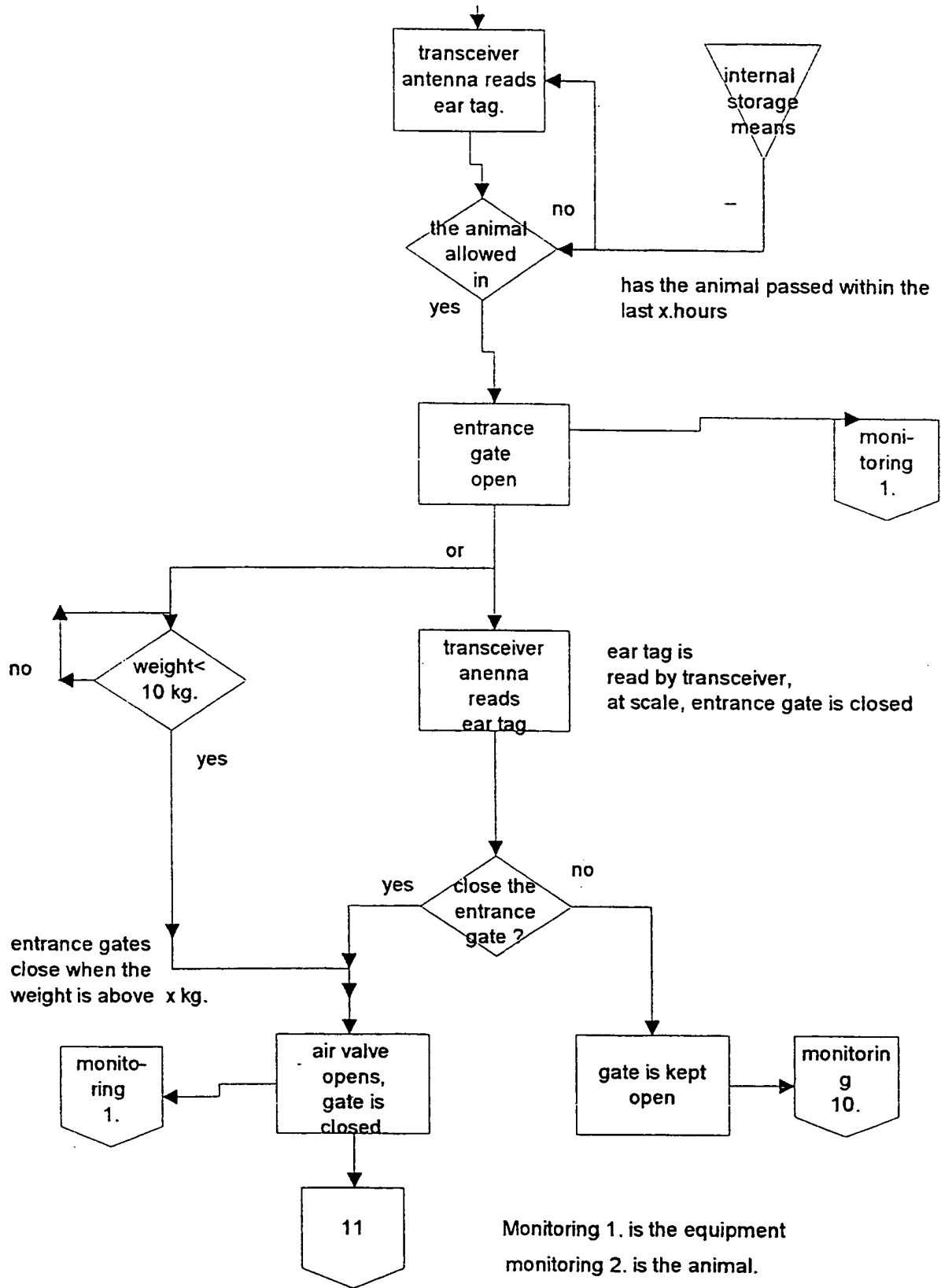


Fig. 4

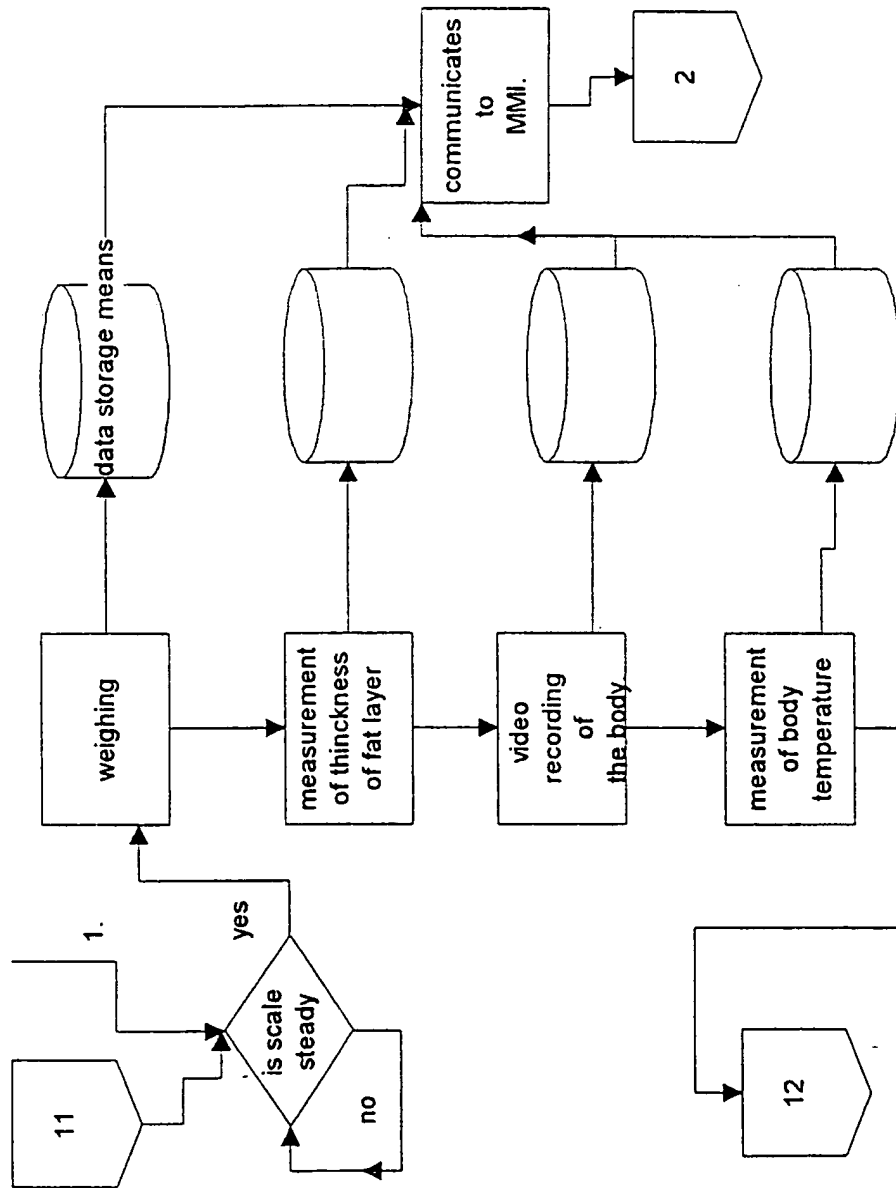


Fig. 5

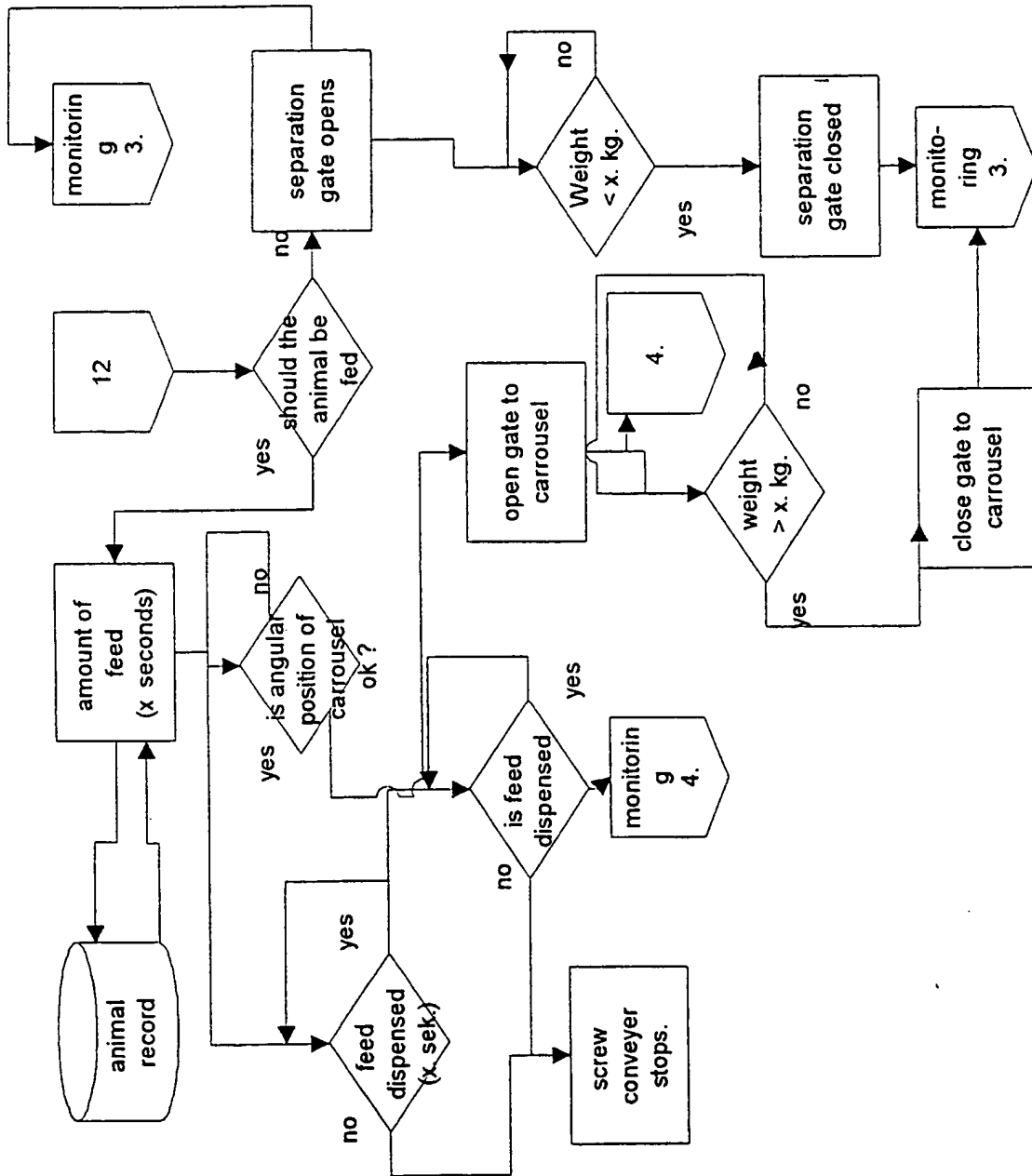


Fig. 6

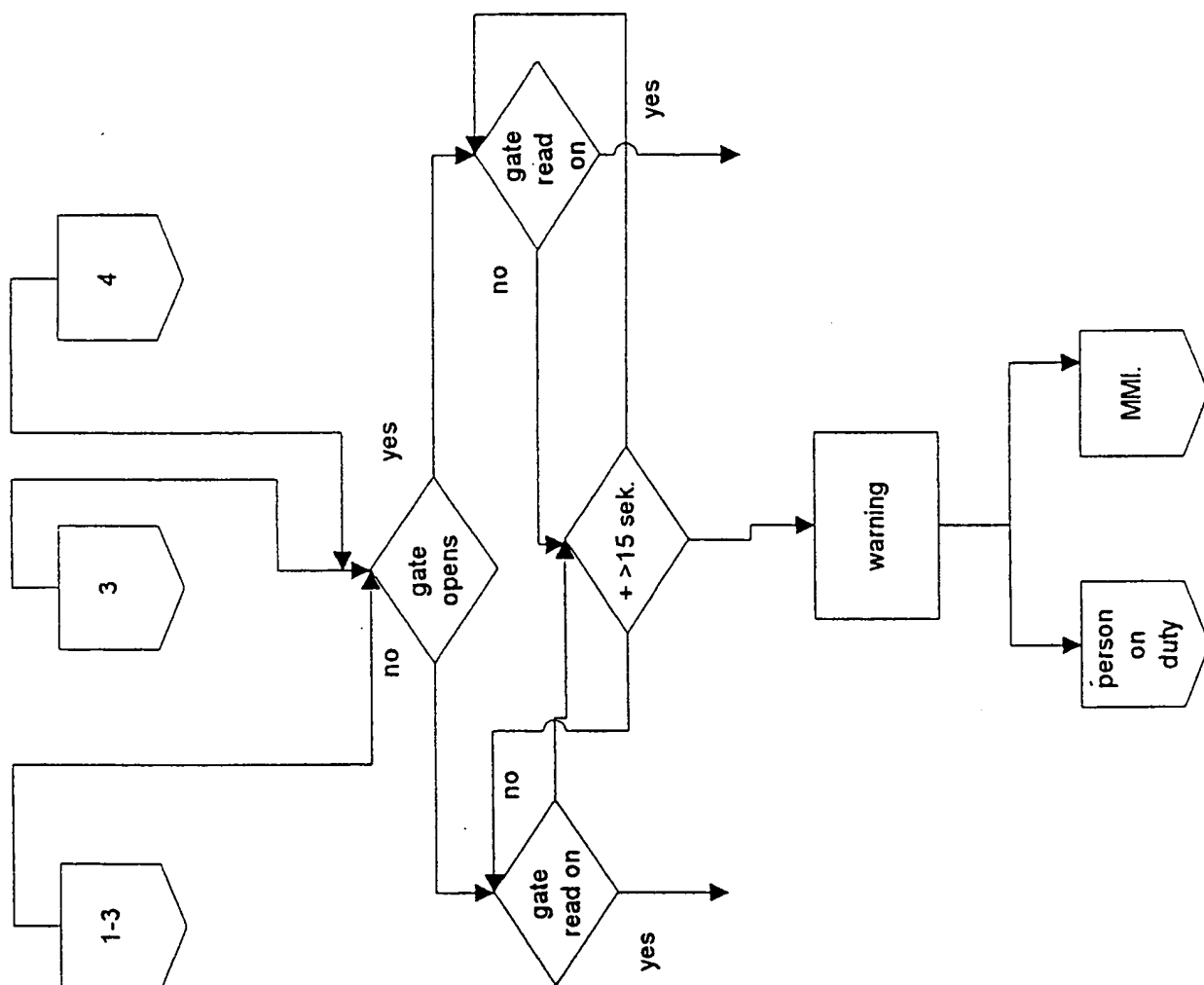


Fig. 7

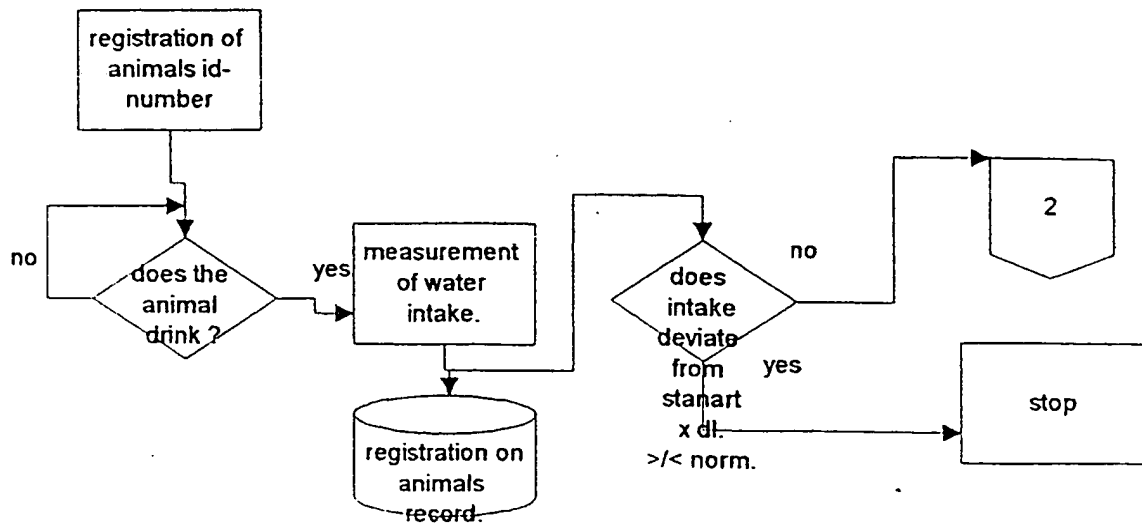


Fig. 8

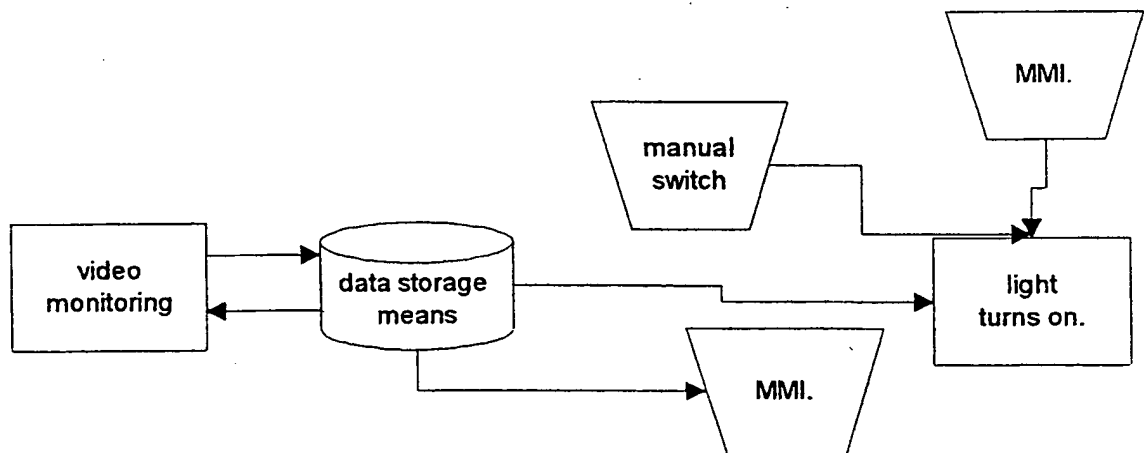


Fig. 9

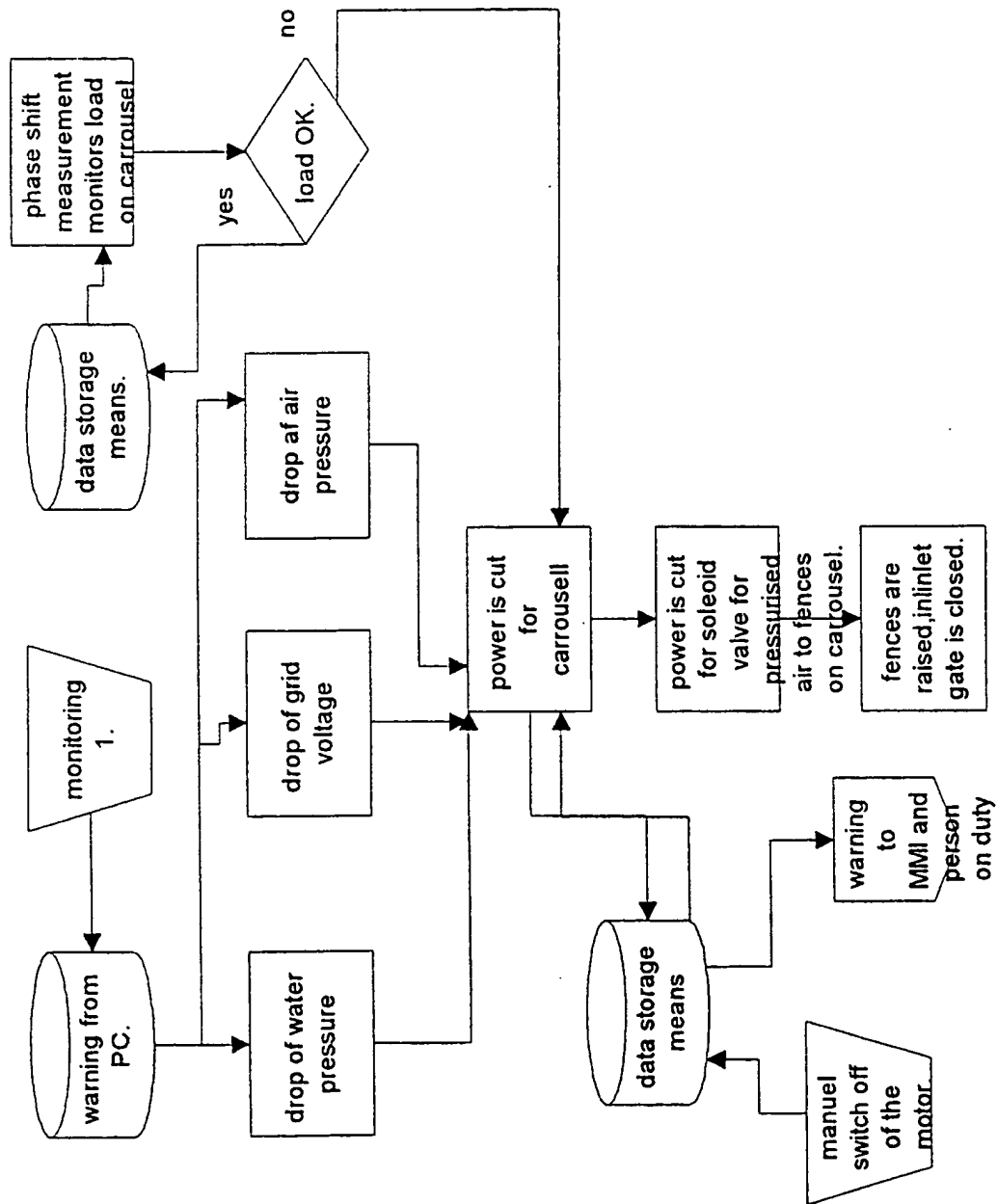


Fig. 10

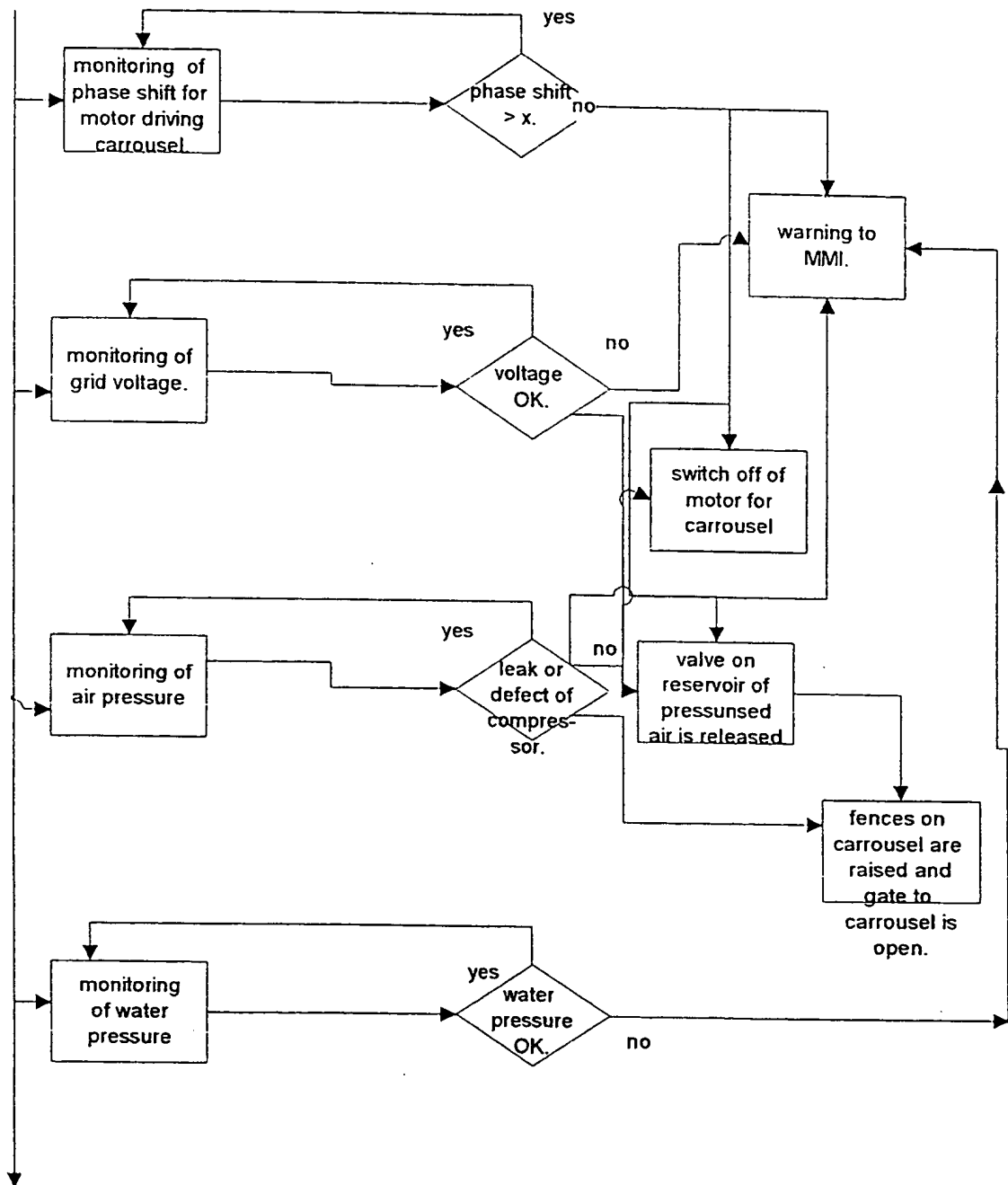


Fig. 11

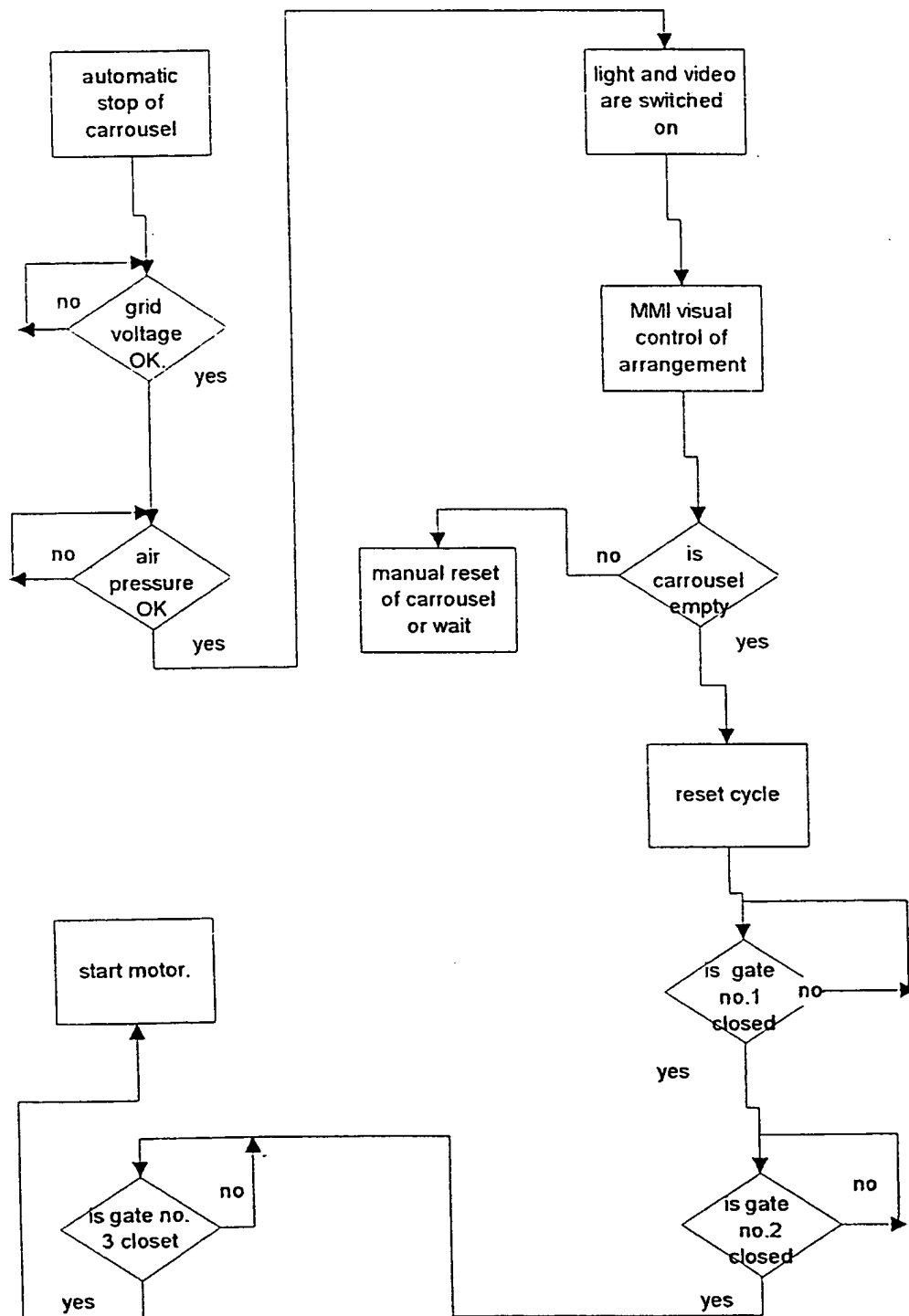


Fig. 12

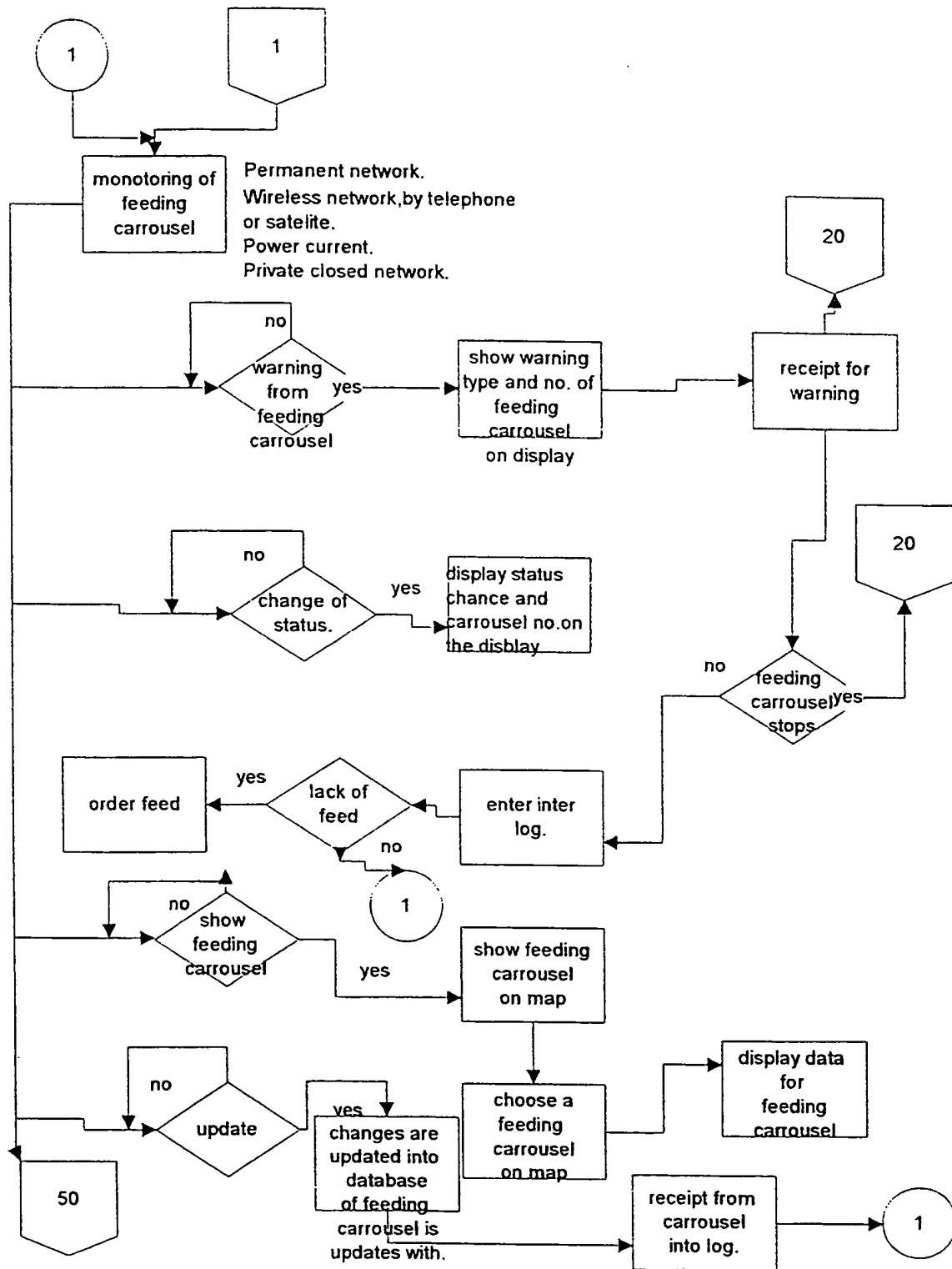


Fig. 13

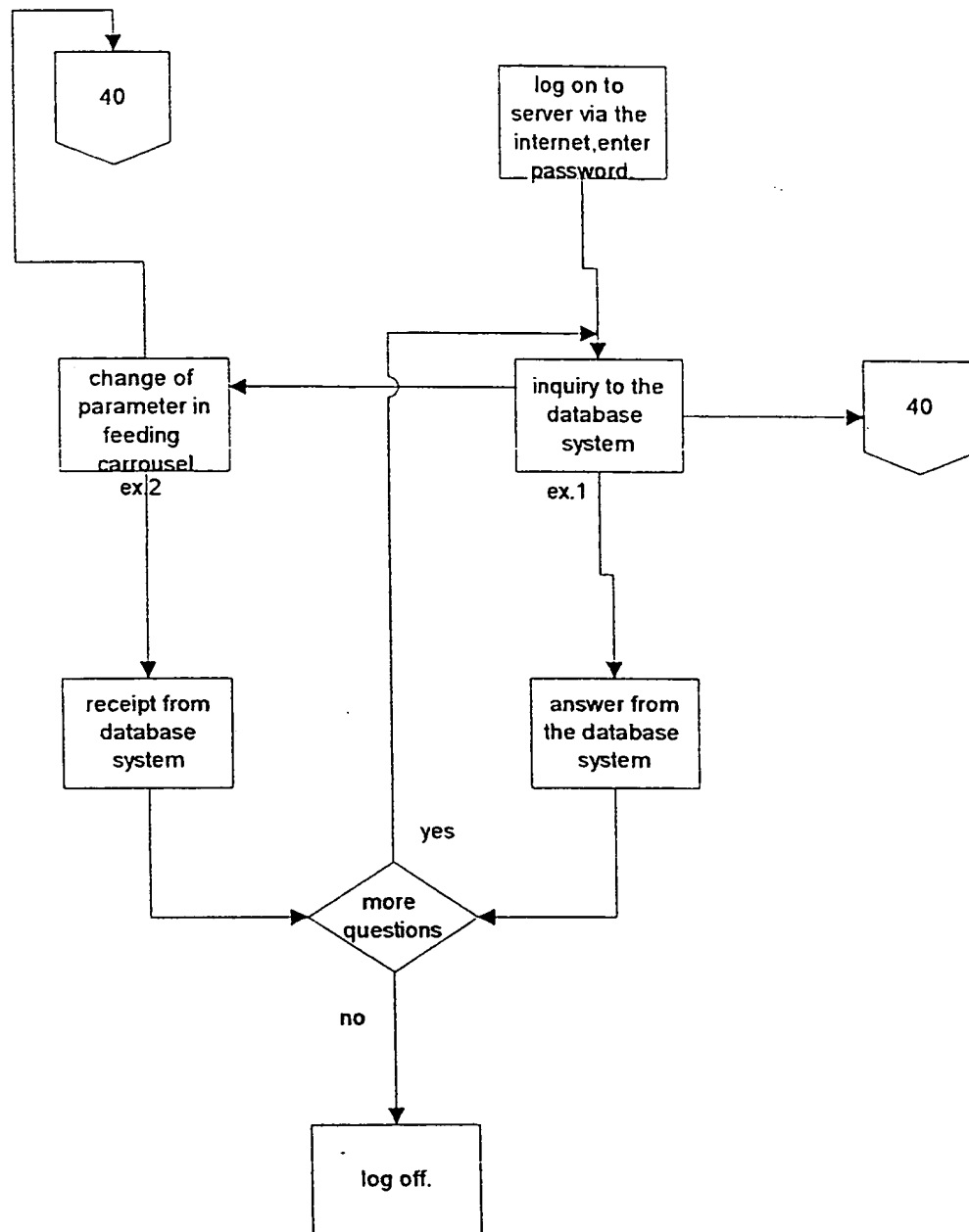


Fig. 14

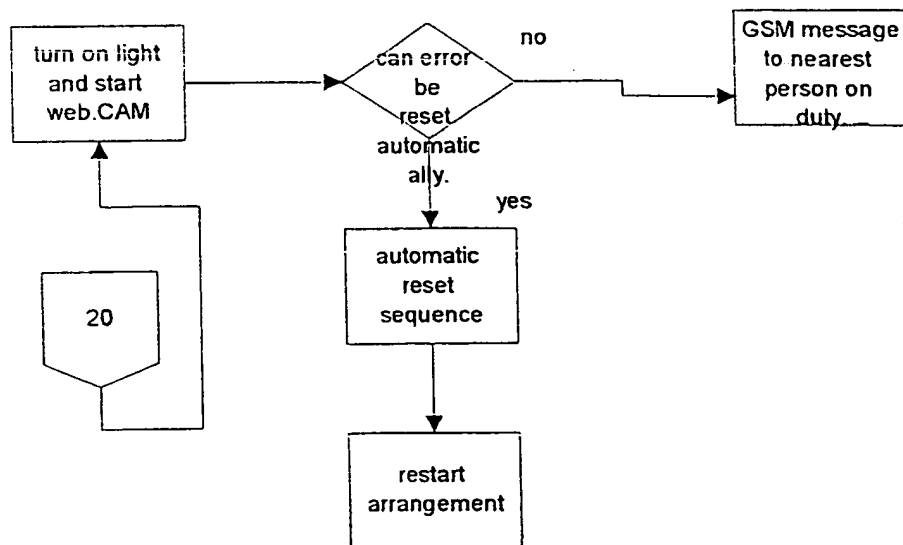


Fig. 15

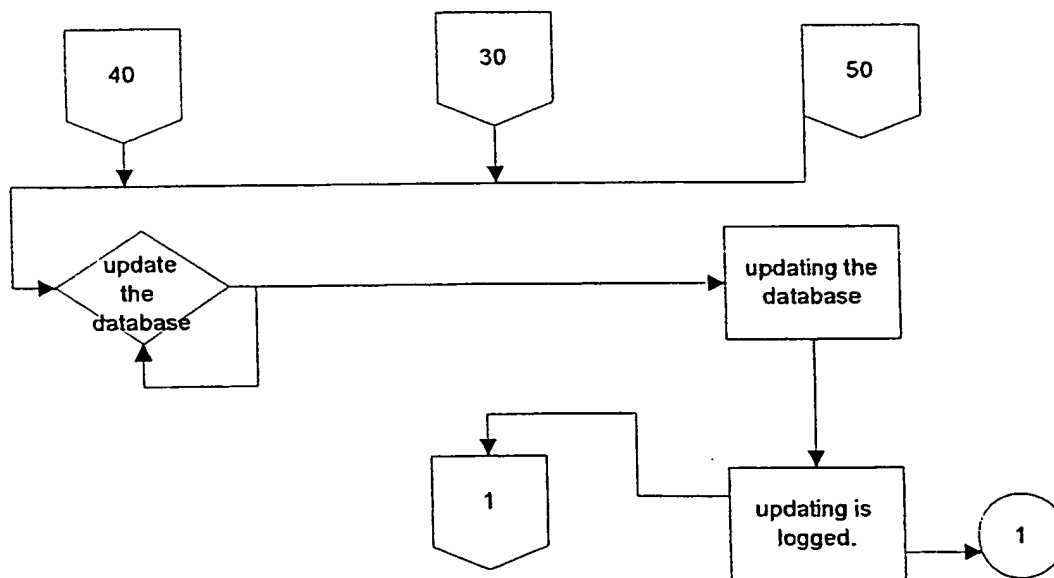


Fig. 16

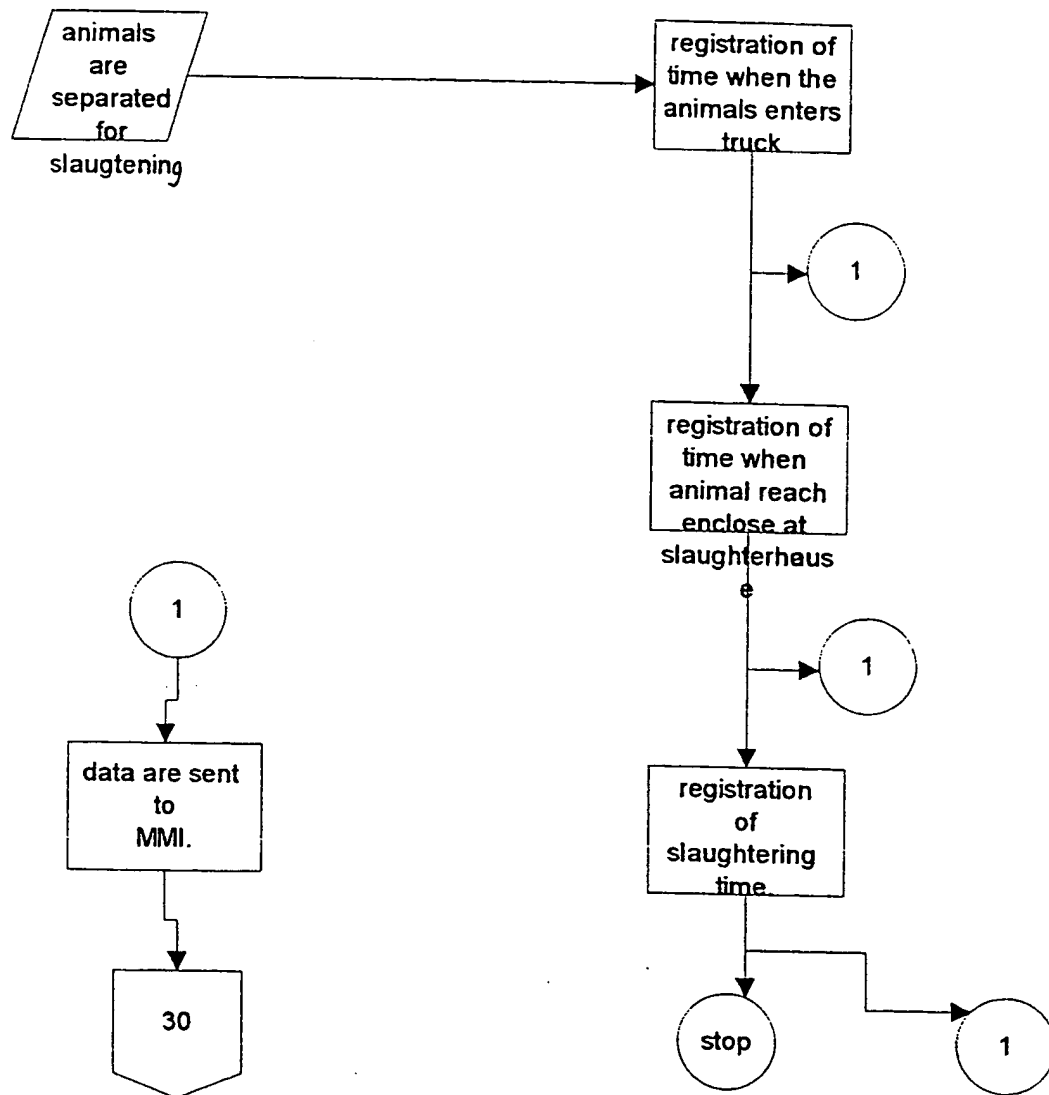
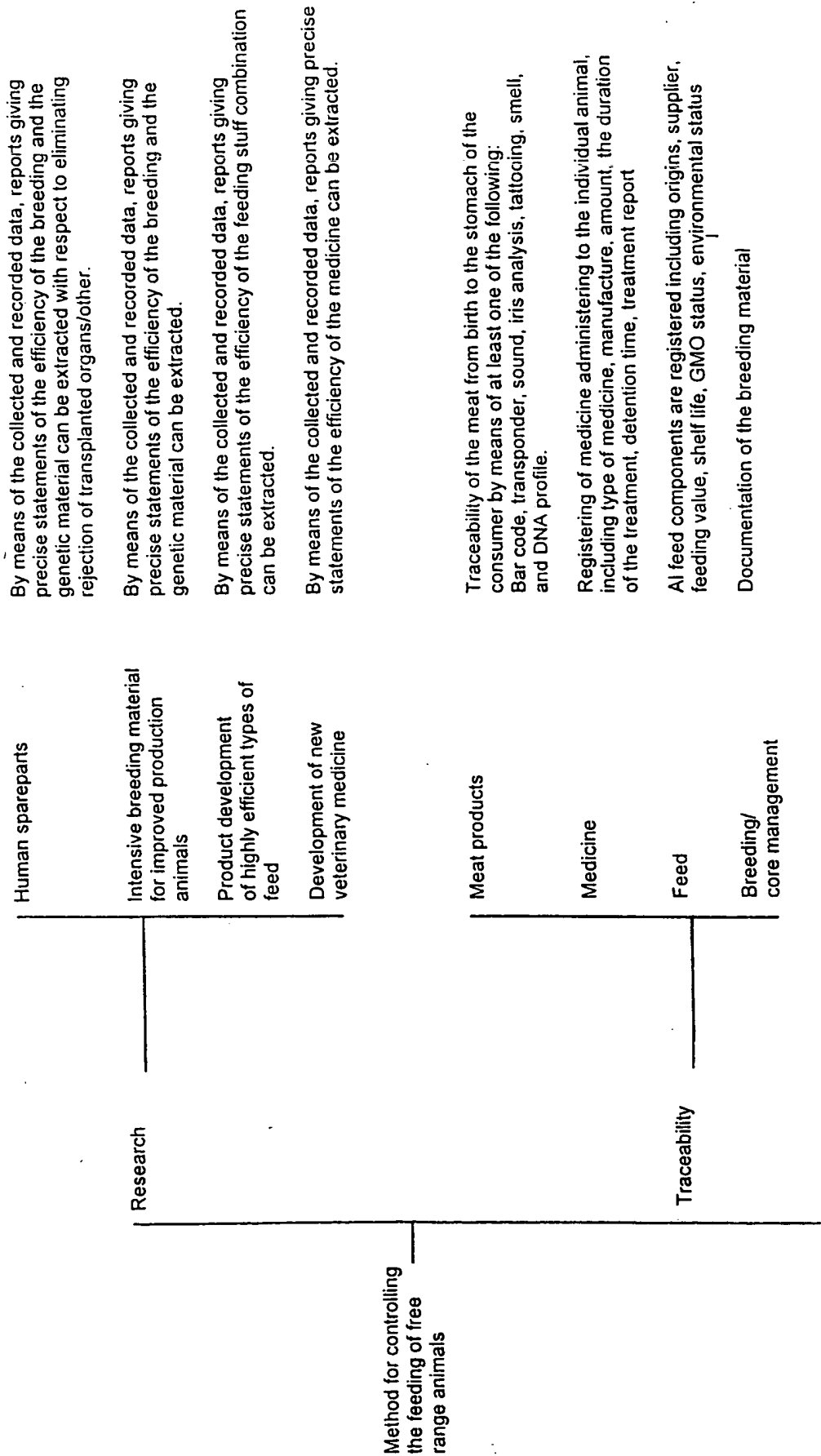


Fig. 17



(Cont. on Fig. 18b)

Fig. 18a

(Cont. from Fig. 18a)

Machine management interface	Monitoring of feeding robots and other equipment	All equipment is monitored all 24 hours, defects are corrected and possible manual intervention is co-ordinated.
	Communication	Communication between the feeding robots, MMI and the user takes place via public nets and wireless.
	Database design	Closed database structure, inquiries are answered via pre-determined reports that are ordered over the internet.
Electronic care	Controlled feeding of the individual animal	1 feeding key is applied at a minimum.
	Control of the dosed amount of water for the individual animal	The amount of water is compared with numbers of experience based on temperature, wind speed, humidity of the atmosphere, the animal's age, weight, and race.
	Registering of data	The following data are registered regularly: Weight, temperature, time, water consumption, stress measurement, blood pressure, pupils, attendance control, silhouette photographing, fat scanning, and mating control by means of an electronic nose.
	Stock check	Monitoring of the stock and automatic re-ordering of a.o.: feed, medicine, and water.
	Separation of the individual animal	For slaughtering For observation for illness, sorting-out takes place automatically from the registered data.
	Identification of the individual animal	The identity of the animal is maintained by one or more of the following: bar code, transponder, sound, iris analysis, tattooing and smell.
	Control of in-take of feeding	By means of image recognition possible remains in the feeding trough are controlled and evaluated after the animal has left the feeding robot.
	Mixing of feed	The feed can be mixed both in respect of type (soy meal, species of grain, turnips) and weight conditions. Vitamins and amino acids may be added.

Fig. 18b